

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/536,491

Source: PT/10

Date Processed by STIC: 6/6/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 06/06/2005

PATENT APPLICATION: US/10/536,491

TIME: 11:41:11

Input Set : A:\SEQ LISTING - US NOB-16.txt

Output Set: N:\CRF4\06062005\J536491.raw

5 <110> APPLICANT: PEPPELENBOSCH, Maikel Petrus  
 6 ZIVKOVIC, Danica  
 7 DIKS, Sander  
 8 BINK, Robert Jozef  
 11 <120> TITLE OF INVENTION: Asb transcription repressor proteins and nucleic acids  
 12 and their application in expansion of stem cells  
 16 <130> FILE REFERENCE: 28902.00016  
 C--> 19 <140> CURRENT APPLICATION NUMBER: US/10/536,491  
 21 <141> CURRENT FILING DATE: 2005-05-25  
 24 <150> PRIOR APPLICATION NUMBER: PCT/NL2003/000831  
 26 <151> PRIOR FILING DATE: 2003-11-25  
 29 <150> PRIOR APPLICATION NUMBER: NL 02079903.74  
 31 <151> PRIOR FILING DATE: 2002-11-25  
 35 <160> NUMBER OF SEQ ID NOS: 4  
 39 <170> SOFTWARE: PatentIn version 3.1  
 43 <210> SEQ ID NO: 1  
 45 <211> LENGTH: 293  
 47 <212> TYPE: PRT  
 49 <213> ORGANISM: Danio rerio  
 53 <400> SEQUENCE: 1  
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 56 1 5 10 15  
 59 His Arg Phe His Met Tyr Gly Gly Gln Thr Cys Ser Pro Leu Met Ala  
 60 20 25 30  
 63 Gly Ser Trp Asp Asp Arg Thr Pro Leu His Asp Ala Ala Leu Gln Gly  
 64 35 40 45  
 67 Arg Leu Leu Pro Leu Arg Arg Leu Leu Ser Gln Gly Tyr Asn Val Gly  
 68 50 55 60  
 71 Met Ala Thr Leu Asp Gly Ile Thr Ala Leu His Glu Ala Cys Val Gly  
 72 65 70 75 80  
 75 Gly His Phe Thr Cys Ala Lys Leu Leu Leu Glu His Gly Ala Asp Ala  
 76 85 90 95  
 79 Asn Ala Val Thr Phe Asp Gly Ala Thr Pro Leu Phe Ser Ala Cys Cys  
 80 100 105 110  
 83 Ser Gly Asn Pro Ala Leu Val Ser Leu Ile Leu Thr His Ser Ser Ala  
 84 115 120 125  
 87 His His Pro Ala His Leu Leu Cys Ser Pro Leu His Glu Ala Ala Lys  
 88 130 135 140  
 91 Arg Gly His Thr Ala Cys Val Glu Leu Leu Leu Ser His Gly Val Asn  
 92 145 150 155 160  
 95 Val Asp Met Glu Leu Pro Ser Val Gly Thr Ala Leu Tyr Cys Ala Cys  
 96 165 170 175  
 99 Glu Val Lys Ser Thr Asp Cys Val Leu Thr Leu Leu Ile Leu Gly Ala

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103 Asp Val Gln Cys Gly Arg Gly Leu Asp Thr Pro Leu His Ala Ala Cys
104          195          200          205
107 Arg Val Gly Gly Ala Lys Glu Ala Glu Leu Leu Leu Glu His Gly Ala
108          210          215          220
111 Asp Arg Thr Ser Arg Asn Ser Glu Gly Lys Thr Pro Leu Asp Leu Thr
112 225          230          235          240
115 Ser Asp Gln Ser Ile Lys His Leu Leu Gln Thr Ala Gly Thr Cys Ser
116          245          250          255
119 Leu Ser Gln Leu Cys Arg Trp Cys Ile Arg Arg Ser Leu Gly Gln Lys
120          260          265          270
123 Gly Leu Asn Lys Thr Lys Thr Leu Cys Leu Pro His Met Leu His Asn
124          275          280          285
127 Tyr Leu Leu Tyr His
128          290
131 <210> SEQ ID NO: 2
133 <211> LENGTH: 879
135 <212> TYPE: DNA
137 <213> ORGANISM: Danio rerio
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146 ttacacgatg ctgctttgca aggaagactg cttccactga gaagactcct ctcacagggc      180
148 tacaatgttg gaatggcgac tttagatgga atcacagcac tgcataaagc ttgtgttgga      240
150 ggacatttca cctgtgctaa acttctcctg gaacatgggtg cagatgcaaa tgcagtgact      300
152 tttgatggag ccactcctct gttcagtgcc tgcctgcagtg gaaaccccg ccttgtcagc      360
154 ctcatattga cacacagctc cgcccacat ccagctcacc tgctctgctc acctctgcat      420
156 gaagctgcaa agagaggtca cacggcctgt gttgaactgc tgttgtctca tgggtgtgaa      480
158 gtggacatgg agctgcccag tgttggaaca gcgctgtact gtgcatgtga agtcaagagc      540
160 acagactgtg tactgaccct gctgatctta ggtgctgatg tacaatgtgg gcgtggcctt      600
162 gacacacctt tacatgctgc atgcagagtt ggtggagcaa aagaggcgga gctactatta      660
164 gaacacgggg ctgatcgta atctagaaac tctgagggaa agacacctct ggatctgacc      720
166 tcagatcaga gcatcaaaca cctcttgca actgcaggta cctgctctct gtctcagcta      780
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175 <211> LENGTH: 329
177 <212> TYPE: PRT
179 <213> ORGANISM: Homo sapiens
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189 Val Tyr Phe Thr Ile Leu Ser Leu Phe Cys Phe Lys Leu Phe Val Lys
190          20          25          30
193 Ile Ser Leu Ala Ile Leu Ser His Phe Tyr Ile Val Lys Gly Asn Arg
194          35          40          45
197 Lys Glu Ala Ala Arg Ile Ala Ala Glu Phe Tyr Gly Val Thr Gln Gly
198          50          55          60
201 Gln Gly Ser Trp Ala Asp Arg Ser Pro Leu His Glu Ala Ala Ser Gln

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202 65          70          75          80
205 Gly Arg Leu Leu Ala Leu Arg Thr Leu Leu Ser Gln Gly Tyr Asn Val
206          85          90          95
209 Asn Ala Val Thr Leu Asp His Val Thr Pro Leu His Glu Ala Cys Leu
210          100          105          110
213 Gly Asp His Val Ala Cys Ala Arg Thr Leu Leu Glu Ala Gly Ala Asn
214          115          120          125
217 Val Asn Ala Ile Thr Ile Asp Gly Val Thr Pro Leu Phe Asn Ala Cys
218          130          135          140
221 Ser Gln Gly Ser Pro Ser Cys Ala Glu Leu Leu Leu Glu Tyr Gly Ala
222 145          150          155          160
225 Lys Ala Gln Leu Glu Ser Cys Leu Pro Ser Pro Thr His Glu Ala Ala
226          165          170          175
229 Ser Lys Gly His His Glu Cys Leu Asp Ile Leu Ile Ser Trp Gly Ile
230          180          185          190
233 Asp Val Asp Gln Glu Ile Pro His Leu Gly Thr Pro Leu Tyr Val Ala
234          195          200          205
237 Cys Met Ser Gln Gln Phe His Cys Ile Trp Lys Leu Leu Tyr Ala Gly
238          210          215          220
241 Ala Asp Val Gln Lys Gly Lys Tyr Trp Asp Thr Pro Leu His Ala Ala
242 225          230          235          240
245 Ala Gln Gln Ser Ser Thr Glu Ile Val Asn Leu Leu Leu Glu Phe Gly
246          245          250          255
249 Ala Asp Ile Asn Ala Lys Asn Thr Glu Leu Leu Arg Pro Ile Asp Val
250          260          265          270
253 Ala Thr Ser Ser Ser Met Val Glu Arg Ile Leu Leu Gln His Glu Ala
254          275          280          285
257 Thr Pro Ser Ser Leu Tyr Gln Leu Cys Arg Leu Cys Ile Arg Ser Tyr
258          290          295          300
261 Ile Gly Lys Pro Arg Leu His Leu Ile Pro Gln Leu Gln Leu Pro Thr
262 305          310          315          320
265 Leu Leu Lys Asn Phe Leu Gln Tyr Arg
266          325
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271 <211> LENGTH: 990
273 <212> TYPE: DNA
275 <213> ORGANISM: Homo sapiens
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282 atacttttgc tgttctgttt taagcttttt gtgaaaatca gccttgccat cctcagtcac 120
284 ttctacatag tgaaaggcaa ccgcaaggaa gcggcaagga tagcagctga attttatgga 180
286 gtaacccaag gacaagggtc ctgggcagat cgatcaccac tacatgaagc agcaagtcaa 240
288 ggtcgccctt ttgctctgag aacattatta tcacagggtt ataatgtaaa tgcagtaacc 300
290 ttagaccatg tcaccccatt gcacgaagcc tgccttgagg atcacgtggc atgtgccaga 360
292 actctgctgg aagcaggagc taatgtaaat gcaatcacga tagatggcgt gactccgtta 420
294 ttcaacgcat gtcccaagg cagtccaagc tgtgcagagc tgcttctgga gtatggtgcc 480
296 aaagcccagc tggagtcacg tcttccatcc ccaacgcatg aggccgccag taaaggtcac 540
298 catgaatgtc ttgacatcct gatatcctgg ggcatagatg ttgaccaaga aattcctcat 600
300 ttgggaactc ctctctatgt agcttgatgt tcacagcaat tccattgcat ctggaagctt 660

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304	gctcaacaat	ccagcacaga	aattgtaaac	ttactgctag	aatttggagc	agatatcaat	780
306	gccaaaaata	cagagcttct	gcgacctata	gatgtagcta	cgtctagcag	tatggtggaa	840
308	agaatattgc	ttcaacatga	agctacccca	agctctcttt	accaactttg	ccgactctgt	900
310	atccgaagct	acataggaaa	accaagattg	caccttatcc	cacaactcca	gctgccaacg	960
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/536,491

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L:19 M:270 C: Current Application Number differs, Replaced Current Application Number